What Is Claimed Is:

1. A torque converter, comprising:

a flywheel rotating about a first axis, the flywheel including:

a first body portion;

a first plurality of permanent magnets mounted in the first body portion, each of the first plurality of permanent magnets extending along a corresponding radial axis direction with respect to the first axis; and

a second plurality of permanent magnets mounted in the first body portion; each of the second plurality of permanent magnets being located between a corresponding adjacent pair of the first plurality of permanent magnets; and

a generator disk rotatable about a second axis perpendicular to the first axis, the generator disk including:

a second body portion; and

a third plurality of permanent magnets within the second body portion magnetically coupled to the first and second pluralities of permanent magnets.

2. The torque converter according to claim 1, wherein the flywheel further comprises a plurality of backing plates, each backing plate disposed adjacent to each of the first plurality of permanent magnets.

3. The torque converter according to claim 2, wherein the backing plates force a magnetic field strength along the radial axis direction toward a circumference of the flywheel.

4. The torque converter according to claim 3, wherein the first and second pluralities of permanent magnets and the backing plates form a sinusoidal magnetic force pattern along the circumference of the flywheel.

5. The torque converter according to claim 4, wherein the third plurality of permanent magnets are magnetically coupled to the first and second pluralities of permanent magnets when the flywheel is rotated about the first axis.

6. The torque converter according to claim 5, wherein a portion of the sinusoidal magnetic force pattern is deformed within a region between one of the first and second pluralities of permanent magnets and the third plurality of permanent magnets.

7. The torque converter according to claim 6, wherein the deformed portion of the sinusoidal magnetic force pattern is restored when the flywheel is further rotated about the first axis.

8. The torque converter according to claim 1, wherein the flywheel and the generator disk are separated by an air gap.

9. A system for generating electrical power, comprising:

a motor;

a flywheel coupled to the motor, the flywheel rotating about a first axis and including:

a first body portion;

a first plurality of permanent magnets mounted in the first body portion, each of the first plurality of permanent magnets extending along a corresponding radial axis direction with respect to the first axis; and

a second plurality of permanent magnets mounted in the first body portion; each of the second plurality of permanent magnets being located between a corresponding adjacent pair of the first plurality of permanent magnets;

at least one generator disk rotatable about a second axis perpendicular to the first axis and magnetically coupled to the flywheel, each generator disk including:

a second body portion; and

a third plurality of permanent magnets within the second body portion magnetically coupled to the first and second pluralities of permanent magnets; and

at least one electrical generator coupled to the at least one generator disk.

10. The system according to claim 9, wherein the motor is coupled to the flywheel using a first drive shaft to rotate the flywheel along the first axis, and the electrical generator is coupled to the generator disk using a second drive shaft.

11. The system according to claim 10, wherein the electrical generator disk includes a rotor coupled to the second drive shaft and a plurality of stators.

12. The system according to claim 11, further comprising a variable transformer coupled to the at least one electrical generator.

13. The system according to claim 9, wherein the flywheel further comprises a plurality of backing plates, each backing plate disposed adjacent to each of the first plurality of permanent magnets.

14. The system according to claim 13, wherein the backing plates force a magnetic field strength along the radial axis direction toward a circumference of the flywheel.

15. The system according to claim 14, wherein the first and second pluralities of permanent magnets and the backing plates form a sinusoidal magnetic force pattern along the circumference of the flywheel, and the third plurality of permanent magnets are magnetically coupled to the first and second pluralities of permanent magnets when the flywheel is rotated about the first axis.

16. The system according to claim 15, wherein a portion of the sinusoidal magnetic force pattern is deformed within a region between one of the first and second pluralities of permanent magnets and the third plurality of permanent magnets.

17. The system according to claim 16, wherein the deformed portion of the sinusoidal magnetic force pattern is restored when the flywheel is further rotated about the first axis.

18. The system according to claim 9, wherein the at least one generator disk includes a plurality of generator disks each disposed along a circumference of the flywheel.

19. The system according to claim 18, wherein a first plurality of the generator disks are rotatable about the second axis perpendicular to the first axis and are magnetically coupled to the flywheel, and a second plurality of the generator disks are rotatable about a third axis perpendicular to the first axis and the second axis and are magnetically coupled to the flywheel.

20. The system according to claim 18, wherein the at least one electrical generator includes a first plurality of electrical generators each coupled to one of the first plurality of generator disks, and a second plurality of electrical generators each coupled to one of the second plurality of generator disks.

21. A system for converting torque to power, comprising:

a motor;

a flywheel coupled to the motor, the flywheel rotating about a first axis and including:

a first body portion;

a first plurality of permanent magnets mounted in the first body portion, each of the first plurality of permanent magnets extending along a corresponding radial axis direction with respect to the first axis; and

a second plurality of permanent magnets mounted in the first body portion; each of the second plurality of permanent magnets being located between a corresponding adjacent pair of the first plurality of permanent magnets;

at least one generator disk rotatable about a second axis perpendicular to the first axis and magnetically coupled to the flywheel, each generator disk including:

a second body portion; and

a third plurality of permanent magnets within the second body portion magnetically coupled to the first and second pluralities of permanent magnets; and

a second drive shaft coupled to the second body portion rotating about the second axis.

22. The system according to claim 21, wherein the motor is coupled to the flywheel using a first drive shaft to rotate the flywheel along the first axis.

23. The system according to claim 21, wherein the flywheel further comprises a plurality of backing plates, each backing plate disposed adjacent to each of the first plurality of permanent magnets.

24. The system according to claim 23, wherein the backing plates force a magnetic field strength along the radial axis direction toward a circumference of the flywheel.

25. The system according to claim 24, wherein the first and second pluralities of permanent magnets and the backing plates form a sinusoidal magnetic force pattern along the circumference of the flywheel, and the third plurality of permanent magnets are magnetically coupled to the first and second pluralities of permanent magnets when the flywheel is rotated about the first axis.

26. The system according to claim 25, wherein a portion of the sinusoidal magnetic force pattern is deformed within a region between one of the first and second pluralities of permanent magnets and the third plurality of permanent magnets.

27. The system according to claim 26, wherein the deformed portion of the sinusoidal magnetic force pattern is restored when the flywheel is further rotated about the first axis.

28. The system according to claim 21, wherein the at least one generator disk includes a plurality of generator disks each disposed along a circumference of the flywheel.

29. The system according to claim 28, wherein a first plurality of the generator disks are rotatable about the second axis perpendicular to the first axis and are magnetically coupled to the flywheel, and a second plurality of the generator disks are rotatable about a third axis perpendicular to the first axis and the second axis and are magnetically coupled to the flywheel.